Interstate 680 SMART Lane Project

What is a "SMART" Lane?
When a high-occupancy vehicle (HOV) lane is underutilized and has excess capacity, single-occupant vehicles (SOV) can be permitted in the lane in exchange for paying a toll. This is called a SMART Lane, SMART lanes have also been called high-occupancy toll or HOT lanes.

What is the purpose of a SMART lane?
There are three main objectives for SMART lanes. (1) Use existing highway capacity more efficiently by fully utilizing the lanes and taking vehicles out of the other non-HOV lanes. (2) Give drivers an option to save time and bypass traffic congestion in exchange for paying a toll. (3) Raise revenues that can be used to finance improvements on the corridor such as completing the northbound HOV lane, park-and-ride lots and better bus service.

How would the toll level be determined?
The toll would vary by time of day and day of the week. For example, it would be highest during the peak traffic period and lowest (if charged at all) during the night hours.

Will allowing toll-paying vehicles on the HOV lanes just create congestion on those lanes?
No. The toll level can be adjusted upward, or SMART usage could be suspended during times of exceptionally high demand, to make sure that the HOV lanes would continue to be free-flowing.

How would tolls be collected?
The proposal for I-680 is for electronic toll collection. It would use the same technology as the FasTrak toll collection system now used on the Bay Area's bridges. No toll booths will be used. HOVs would continue to use the lanes for free. Enforcement would be done through a combination of enhanced highway patrol and video surveillance.

Where do SMART lanes exist today?
There are currently SMART lanes on State Route 91 in Orange County, Interstate 15 in San Diego, and Interstate 10 and US 290 in Houston, Texas.

What specifically is proposed for I-680?
Caltrans is planning to add HOV lanes in both directions on a 14-mile segment of I-680 from Route 84 to Route 237 in Alameda and Santa Clara counties. The SMART lanes proposal would allow vehicles to pay an electronically-collected variable toll to use these lanes. The HOV/SMART lanes would be separated from the adjacent mixed-flow lanes by double yellow-striped lines. Access to the lanes would be limited to certain locations, at the beginning of the corridor and possibly one or several points along the 14-mile corridor. The access locations are still to be determined.

What are the projected toll levels?
The I-680 Variable Pricing Study has projected the highest peak-period tolls in 2006 to be between $2.87 and $3.13 (in 2002 dollars) for the southbound direction in the morning peak period, or a range of 20 to 22 cents/mile, depending upon which access limitations are selected and assuming that the carpool definition remains at 2+ persons. The tolls could be adjusted based on experience after the SMART lanes open, depending upon congestion levels and demand for the SMART lanes. These per-mile proposed toll levels are lower than those charged on other SMART lanes.

What are the revenue and operational cost projections for SMART lanes?
The projection is for first-year revenues in a range of $6.3 to $14.7 million. The operations cost to administer the lanes is estimated to be $1.1 million. Under full implementation in both directions, the net revenue estimate (gross revenues minus cost) over a 20-year period is between $83 and $228 million.

What is the proposed federal pilot project earmark?
Alameda County has proposed a pilot project earmark for $10 million to test the feasibility of SMART lanes on the I-680 corridor. The pilot project would incorporate only the HOV lane in the southbound direction, which is due to be brought to full Caltrans standard by 2007. It would pay for electronic toll collection

equipment and infrastructure, monitoring and evaluation, and weaving lanes at HOV/SMART lane entrance/exit locations.